

File 2

File Copy

A STUDY OF THREE AREAS UNDER CONSIDERATION  
FOR ANNEXATION BY THE CITY OF KIRKWOOD, MISSOURI

Prepared for  
The City Council of Kirkwood  
Missouri

by  
The Governmental Research Institute  
St. Louis, Missouri  
December 1956

## TABLE OF CONTENTS

	<u>Page</u>
Description of Kirkwood and Areas I, II, and III -----	1
Kirkwood -----	1
Area I -----	2
Area II -----	3
Area III -----	4
Summary -----	5
Estimated Cost of Extending Municipal Services to Areas I, II, and III -----	6
Public Library Fund -----	7
Public Park Maintenance Fund -----	8
Sinking and Interest Fund -----	8
Policemen and Firemen Pension Fund -----	8
Utility Funds -----	9
General and Municipal Fund Costs -----	9
Administration -----	10
Legal -----	10
Collection -----	10
Police -----	11
Fire -----	12
Health -----	12
Sanitation -----	14
Forestry -----	16
Streets -----	17
Building, Zoning, and Plumbing Inspection -----	17
General and Municipal Fund Revenues -----	18
Determination of Property Tax Revenue -----	19
County Road and Bridge Tax Refund -----	20
Business Licenses -----	20
Automobile Licenses -----	21
Gasoline Tax -----	21
Garbage and Refuse Collection Fee -----	21
Miscellaneous Revenues -----	21
Summary of Annexation Costs and Revenues -----	22
Costs of Annexation -----	23
Revenue Received From Annexation -----	24
Conclusion -----	25

## List of Tables

	<u>Page</u>	
Table 1	City of Kirkwood--Increase in Area by Annexation (1865-1952).....	2
Table 2	Population and Area of Kirkwood and Areas I, II, and III, and Effects of Annexation .....	6
Table 3	Estimated Costs (First Year) to Extend Municipal Services to Areas I, II, and III--General and Municipal Fund .....	10
Table 4	Estimated Assessed Valuation of Taxable Property in Areas I, II, and III-- General and Municipal Fund .....	18
Table 5	Estimated Revenue from Areas I, II, and III-- General and Municipal Fund .....	18
	Summary of Annexation Costs and Revenues-- General and Municipal Fund.....	23

A STUDY OF THREE AREAS UNDER CONSIDERATION  
FOR ANNEXATION BY THE CITY OF KIRKWOOD, MISSOURI

Prepared by  
The Governmental Research Institute  
Paul Brown Building, St. Louis, Missouri  
December 1956

The Governmental Research Institute was requested by the City of Kirkwood, Missouri, to study and report on the advantages and disadvantages to Kirkwood of annexing one or more of three adjacent areas. These areas were designated as follows:

- Area I. City of Oakland
- Area II. Meacham Park area plus the Mary Hurst property
- Area III. Sunset Manor subdivision plus an area between the southern boundary of Kirkwood and Highway #66.

The findings and conclusions resulting from the Institute's study are presented in this report.

The report is based upon field surveys of the three areas made by a member of the Institute's staff, data obtained from the official records of Kirkwood and St. Louis County, special reports prepared by department heads of the Kirkwood City Government, and interviews with officials and employees of Kirkwood and St. Louis County.

The Institute wishes to thank all these individuals for their cooperation and assistance.

Description of Kirkwood and Areas I, II, and III

Kirkwood

Kirkwood is located in St. Louis County, Missouri, about four miles beyond the western boundaries of the City of St. Louis. It operates under a statutory charter as a city of the third class.

Officials of Kirkwood estimate that the City now has a population of 28,000\*. This figure represents a substantial growth since 1950, when the City's population was 18,587.

The present area of Kirkwood is 4,892.54 acres or 7.65 square miles, almost eight times the area of the City when it was originally incorporated in 1865. The table below shows the increase in area as a result of eight annexations of adjacent areas.

Table 1

City of Kirkwood  
Increase In Area By Annexation (1865-1952)

<u>Year</u>	<u>Area Added</u>	
	<u>Acres</u>	<u>Square Miles</u>
1865** -----	640.00	1.00
1899 -----	800.00	1.25
1900 -----	160.00	0.25
1920 -----	480.00	0.75
1925 -----	800.00	1.25
1927 -----	1,171.20	1.83
1941 -----	87.04	0.14
1949 -----	63.10	0.10
1952 -----	<u>691.20</u>	<u>1.08</u>
Total -----	4,892.54	7.65

All of Kirkwood is within the boundaries of the R-7 School District and the Metropolitan St. Louis Sewer District.

Area I

Area I consists of Oakland, a city of the fourth class incorporated in 1920. Its population in 1956 is estimated to be 2,225 and its area is 450 acres. Annexation of Area I would increase the population of Kirkwood by 8.0%, and its area by 7.2%.

Area I, or Oakland, is bounded on the north by a line just south of

\*The population estimate was arrived at by multiplying the number of water meters by the average number of persons served by each meter.

\*\*Date of original incorporation.

Lockwood Avenue, on the west by Holmes Avenue, on the south by Big Bend Boulevard, and on the east by Berry Road. A map of Oakland is attached at the end of this report.

Oakland is almost exclusively residential in character, having but three business establishments and no industrial plants. However, within the City are a country club with a large private golf course, a private educational academy, and a large private home for elderly persons. Two major railroads run through the City.

All of Oakland is within the boundaries of the R-7 School District, the Metropolitan St. Louis Sewer District, and the St. Louis County Library District.

#### Area II

The Meacham Park area (including the portion between Big Bend Boulevard and Attucks Street) and the tract of land immediately west of it known as the Mary Hurst property are designated as Area II. Although Meacham Park was subdivided into lots in 1892, it is still unincorporated. The Mary Hurst property also is unincorporated area.

The total population of Area II in 1956 is estimated to be 1,630 (negro 1,234 and white 396). This total figure includes 76 students and faculty of the Mary Hurst Normal School.

The size of Area II is 255 acres--175 acres in Meacham Park and 80 acres in the Mary Hurst property.

Annexation of Area II would increase Kirkwood's population by 5.8% and its area by 5.2%.

Meacham Park is bounded on the north by Big Bend Boulevard, on the west by Lindbergh Boulevard, on the south by Rayburn Avenue, and on the east by Tolstoi Street and its extension to Big Bend Boulevard. The

Mary Hurst property is bounded on the north by Big Bend Boulevard, on the west by the eastern city limit line of Kirkwood, on the south by a private road approximately one-half mile south of Big Bend Boulevard, and on the east by Lindbergh Boulevard. A map showing Meacham Park and the Mary Hurst property is attached at the end of this report.

Meacham Park, with the exception of the business and commercial establishments on the east side of Lindbergh Boulevard, is primarily residential. The St. Louis County Land Clearance For Redevelopment Authority is considering Meacham Park as one of several areas to be included in a program of land clearance for redevelopment by the Authority.

The Mary Hurst property, all privately owned, is the location of the Mary Hurst Normal School. The northeast corner of the property was acquired by the Central Hardware Company in 1955. Early in 1956 the Company built a large branch store on the corner.

Area II is within the boundaries of the R-7 School District, the Metropolitan St. Louis Sewer District, and the St. Louis County Library District. Meacham Park comprises about 80% of the Meacham Park Fire District.

### Area III

The estimated population and size of the two unincorporated areas which together constitute Area III are as follows:

	Population*	Area (acres)*
Sunset Manor	500	80
Highway #66	<u>100</u>	<u>600</u>
Total	600	680

\*Estimates made by the Governmental Research Institute

Annexation of Area III would increase Kirkwood's population by 2.1% and its area by 14.2%.

The boundaries of the Sunset Manor and Highway #66 portions of the area are as follows:

Sunset Manor--On the north, bounded by Rayburn Avenue; on the west by Lindbergh Boulevard; on the south by Highway #66; and on the east by the western city limits of Crestwood.

Highway #66--On the north, bounded by the southern city limits of Kirkwood and the Mary Hurst property; on the west by the Meramec River; on the south by Highway #66; and on the east by Lindbergh Boulevard. A map showing the Sunset Manor and Highway #66 areas is attached at the end of this report.

Sunset Manor was subdivided into lots in 1926 and is primarily a residential area, except for several business and commercial establishments located on the north side of Highway #66 and the east side of Lindbergh Boulevard.

The Highway #66 area is composed primarily of undeveloped rural tracts of land, except for two small subdivisions known as Balmagoun and Orchard Lane. There are several business and commercial establishments on the west side of Lindbergh Boulevard and on the north side of Highway #66.

Area III is within the boundaries of the R-8 School District and the St. Louis County Library District. The Sunset Manor area, but not the Highway #66 area, is within the boundaries of the Metropolitan St. Louis Sewer District.

#### Summary

Table 2, presented below, summarizes the population and size of Kirkwood and Areas I, II, and III.

Table 2

POPULATION AND AREA OF KIRKWOOD AND AREAS I, II AND III,  
AND EFFECTS OF ANNEXATION

<u>Estimated 1956 Population</u>	<u>% Increase in Population of Kirkwood</u>	<u>Acres</u>	<u>% Increase in Area of Kirkwood</u>
Kirkwood ---- 28,000	----%	4,892.54	----%
Area I ---- 2,225	8.0	450.00	7.2
Area II ---- 1,630	5.8	255.00	5.2
Area III ---- 600	2.1	680.00	14.2
Total ---- 32,455	15.9%	6,277.54	26.6%

If all three areas were annexed, this would be the largest single annexation made by Kirkwood, the largest prior annexation being 1,171.20 acres in 1927. The smallest annexation was 63.10 acres in 1949.

Estimated Cost of Extending Municipal Services  
To Areas I, II, and III

Annexation of the areas under study would make it necessary for Kirkwood to extend its municipal services to these areas. Such extension of services would require additional expenditures. At the same time, Kirkwood would collect additional revenues from taxes and other sources as a result of the annexation.

For purposes of this study, officials of Kirkwood have estimated the cost of extending services to each of the three areas. The Institute has analyzed these estimates, but has not undertaken to make independent cost estimates. The Institute has estimated the additional revenue which Kirkwood would receive from each area. Both cost and revenue estimates are based on the present residential and commercial development, and have not been projected to reflect the probable future development of the areas.

Kirkwood, like other governments, handles its expenditures and revenues through a number of separate "funds." It is necessary, therefore, that the additional expenditures and revenues, expected as a result of annexation, be analyzed on the basis of these funds.

Kirkwood has the following funds which receive most of their revenues from property taxes:

<u>Fund</u>	<u>1956 Tax Rate Per \$100 Valuation</u>
General and Municipal Fund -----	44.0¢
Public Library Fund -----	13.0
Public Park Maintenance Fund -----	5.5
Sinking and Interest Fund -----	7.0
Policemen and Firemen Pension Fund -----	<u>10.5</u>
Total -----	80.0¢

In addition, there are two non-tax funds--the Electric Revenue Fund and the Water Revenue Fund. These funds reflect the expenditures and revenues of the municipally-owned electric and water systems.

On the following pages, the costs and revenues resulting from annexation are analyzed. The General and Municipal Fund is presented in more detail because the great majority of annexation costs would be charged to this fund.

#### Public Library Fund

The head librarian of the Kirkwood Library has estimated that the additional property tax revenue expected from the annexed areas would be sufficient to offset the estimated increase in costs of the library services caused by annexation.

The Public Library Fund would receive \$2,402 in additional property tax revenue from Area I. Of this sum, \$2,000 would be used for the annual salary of an additional member of the library staff, and \$402 would be added to the account for new books, book binding, and book replacements.

It is estimated that the property tax revenues from Areas II and III would be \$1,335 and \$1,256 respectively, such revenues being added to the book account.

#### Public Park Maintenance Fund

The chairman of the Kirkwood Park Board has stated that the additional property tax revenue expected from the annexed areas probably would be sufficient to offset the increased costs of park maintenance which might result from annexation. The Public Park Maintenance Fund would receive about \$1,016 of additional property tax revenue from Area I, about \$565 from Area II, and about \$532 from Area III.

While these revenues should offset the increased cost of maintaining the present municipal park, it should be pointed out that a new program of small neighborhood parks is currently under consideration for Kirkwood. If this program were adopted, the cost of extending it to the annexed areas might require an increase in the present tax for park purposes.

#### Sinking and Interest Fund

There would be no costs of annexation charged to the Sinking and Interest Fund (bonded debt fund). However, if neighborhood parks were developed in the annexed areas, or if a fire station were relocated in order to provide these areas with better protection, the cost of such improvements might require the issuance of bonds which would have to be serviced through this fund.

#### Policemen and Firemen Pension Fund

The actuarial consultant employed by Kirkwood has stated that the Policemen and Firemen Pension Fund is in good shape and improving every year. Consequently, he has stated that, with the additional revenue from the assessed property valuation in the annexed areas and sufficient time

to build up reserves, the fund could meet the estimated pension costs of six additional policemen and three additional firemen without increasing the present tax rate for the pension fund.

The estimated property tax revenue from Area I would be approximately \$1,940, from Area II approximately \$1,078, and from Area III approximately \$1.015.

#### Utility Funds

The Institute was informed by officials of Kirkwood that the municipally-owned electric and water systems would not be extended into any of the three areas being considered for annexation. Instead, the Union Electric Company and the St. Louis County Water Company would be asked to continue to serve these areas, and to extend their services in some portions of the areas. The Institute has not determined whether these private companies would actually agree to provide such extension of services. If extension of Kirkwood's municipally-owned electric and water systems should become necessary or desirable, bond issues might be required. Such bonds probably would be financed from utility revenues, and the effect on utility rates would have to be reviewed at that time.

For the present area of Kirkwood, the cost of fire plugs is charged to the Water Revenue Fund, and the costs of the Fire Department and street lights are charged to the Electric Revenue Fund. However, the additional costs required to provide fire protection and street lights in the annexed areas would not be charged to the two utility funds, unless these areas were served by the municipally-owned utilities. Therefore, for purposes of this report, the additional costs for fire protection and street lights have been charged to the General and Municipal Fund.

#### General and Municipal Fund Costs

Most of the additional costs resulting from annexation would be chargeable to the General and Municipal Fund. These estimated costs, broken down according to function and following generally the form and terminology of Kirkwood's annual financial statement, are shown in Table 3. In estimating costs, however,

all disbursements listed as "Miscellaneous" or "Property Expenses" in the financial statement have, for the purposes of this study, been charged to one of the several functions, such as police or fire. For example, social security taxes have been included in the salaries of personnel assigned to each function rather than lumped together as one item under "Miscellaneous".

Table 3  
ESTIMATED COSTS (FIRST YEAR) TO EXTEND MUNICIPAL SERVICES  
TO AREAS I, II, AND III  
GENERAL AND MUNICIPAL FUND

<u>Municipal Services</u>	<u>Estimated Cost of Service*</u>			<u>All Three Areas</u>
	<u>Area I</u>	<u>Area II</u>	<u>Area III</u>	
Legal -----	\$ ---	\$ ---	---	---
Administration -----	---	---	---	---
Collection -----	575	405	330	---
Police -----	34,763	34,763	34,763	1,310
Fire -----	1,620	14,652	864	34,763**
Health-----	660	800	724	17,136
Sanitation-----	26,330	26,056	85	2,184
Forestry -----	660	660	660	26,670
Streets-----	12,208	16,400	6,381	660**
Building, Zoning, and Plumbing Inspection -----	3,570	3,570	3,570	34,989
<b>Total</b>	<b>\$80,386</b>	<b>\$97,306</b>	<b>\$47,377</b>	<b>\$121,282</b>

\*It should be noted that the figures given above are based on the estimated costs for the first year only, and that the total cost of any new equipment -- such as a garbage and refuse collection truck-- has been charged to the first year and not prorated over the life of the equipment.

\*\*City officials estimate that the cost of extending police, forestry and building, zoning, and plumbing inspection services would be the same for each area as for all three areas combined.

Administration. It is estimated that there would be no additional costs chargeable to the Administration Account if any or all of Areas I,II and III were annexed.

Legal. It is estimated that there would be no additional costs chargeable to the Legal Account if any or all of Areas I,II and III were annexed.

Collection. The estimated cost of extending the services of the Collector's Office to annexed areas is based on data furnished by the City Collector.

It is estimated that the cost of issuing a variety of licenses and permits and the cost of processing additional tax bills would be as follows:

	<u>Cost of Issuing Licenses and Permits</u>	<u>Cost of Process- ing Tax Bills</u>	<u>Total</u>
Area I -----	\$125	\$450	\$575
Area II -----	135	270	405
Area III -----	150	180	330

The additional work would be performed by the present employees working overtime when necessary, or by hiring a part-time worker, or both.

Police. The estimated cost of extending the service of the Police Department to annexed areas is based primarily on data furnished by the Chief of Police.

The Chief of Police has stated that the Police Department is now working at full capacity and that, if any area or combination of areas under study were annexed, the following personnel and equipment would be needed:

Six patrolmen @ annual salary of \$4,500 each -----	\$27,000
Social Security Tax -----	504
One patrol car -----	3,000
Annual cost of operation and maintenance of patrol car (estimate made by Kirkwood City Garage) -----	2,909
Two additional school crossing guards @ annual salary of \$675 each (estimate made by Governmental Research Institute) -----	1,350
 Total -----	\$34,763

The Police Department generally follows the policy of keeping each patrol car one year (70,000 miles) and then trading it in on a new car. This means that the cost of a patrol car, after the first year, would be reduced by the value of the patrol car being traded in.

The Chief of Police has stated, however, that if Area III were annexed there would be certain hours each day when the additional patrolmen and patrol car would not be needed in Area III. During these hours, the men and car would be available for patrol duty in the present area of Kirkwood. The Institute believes that, if Area I, Area II, or all three areas were annexed, a somewhat similar division of patrol duty would result. In other words, the expenditures required to extend police services to the annexed areas would at the same time put the Police Department in a better position to provide more police service in the present area of Kirkwood. This additional

police service might be used to meet needs resulting from the growth of population or the increase in traffic on the City's major streets.

Fire. The estimated cost of extending the services of the Fire Department is based primarily on data furnished by the Fire Chief.

The Fire Chief has stated that no additional personnel or equipment would be needed to extend the fire fighting services to Area I. There would be the cost, however, of \$1,620 for the annual rental of 45 fire hydrants from the St. Louis County Water Company.

To service Area II, three additional firemen would be required at an annual salary of \$4,524 each, or a total annual salary cost of \$13,572. These additional men would be needed primarily to help transport fire hose when it is impossible to place the fire truck near enough to the fire because of lack of streets and the lack of the proper number and location of fire hydrants. The annual rental cost of 30 fire hydrants is estimated to be \$1,080.

The additional personnel that would be needed if Area II were annexed would be used for fire-fighting in Kirkwood as well as in Area II. Consequently, the expenditures required to extend services of the Fire Department to Area II would make possible an expansion of fire-fighting services in the present area of Kirkwood as the population increases.

To service Area III would require no additional personnel or equipment. The annual rental cost of 24 fire hydrants is estimated to be \$864.

It should be noted that areas II and III are beyond the two-mile driving range of either of the two Kirkwood fire houses, and therefore these two areas would not be eligible for the same fire insurance rates as the present City of Kirkwood.

Health. The estimated cost of extending the services of the Health Department is based primarily on data furnished by the Health Commissioner. These services include rabies control, food establishment inspection, and mosquito control.

Kirkwood has a contract with the St. Louis County Health Department for rabies control (dog catching) at a cost of \$5.00 an hour. The estimated annual cost of extending this service to areas I, II, and III is as follows:

Area I	(2 hours per week)	\$520
Area II	(2 hours per week)	520
Area III	(2 hours per week)	520

Kirkwood has a contract with the St. Louis County Health Department for furnishing sanitary inspection of food establishments at an annual cost of \$8 per establishment.

The estimated annual cost of extending this service to areas I, II, and III is as follows:

Area I	(1 establishment)	\$8
Area II	(2 establishments)	16
Area III	(9 establishments)	72

The estimated cost of extending mosquito control services is based on paying the personnel presently doing this work for the additional hours they would have to work during the spring and summer months to service the three areas. The estimated cost for each area is as follows:

Area I	(1 hour per week)	\$132.20
Area II	(2 hours per week)	264.38
Area III	(1 hour per week)	132.20

It is significant that the St. Louis County Health Department made a survey of the sanitary conditions in Meacham Park in 1955. Its findings, submitted in a report made public in November 1955, reveal the following:

1. 21% of the population uses water that is not considered safe from a public health standpoint
2. 86% of the population disposes of sewage improperly so as to endanger the health of the community
3. 74% of the population disposes of garbage in an unsanitary manner
4. 44% of the buildings and adjacent grounds shows evidence of rodents
5. 51% of the buildings and adjacent grounds constitutes potential mosquito-breeding sources.

The St. Louis County Health Commissioner reported to the St. Louis County Council, in September 1956, that in the months since the sanitary survey had been conducted considerable progress had been made in correcting the public health hazards in Meacham Park. Since then, the Meacham Park Improvement Association has requested the St. Louis County Land Clearance for Redevelopment Authority to apply for federal funds to make a survey of the public health hazards of Meacham Park. No action has been taken on this request thus far.

Sanitation (Garbage and Refuse Collection.) The estimated cost of extending garbage and refuse collection service to annexed areas is based primarily on data furnished by the Director of Sanitation.

Kirkwood, by ordinance, requires that garbage and refuse shall be collected either by the City or by an authorized private collector. Each person or business contracting with Kirkwood for this service is charged a fee of \$1.50 per month.

At present, about 63% of all homes and businesses in Kirkwood contract with the City for the collection of garbage and rubbish. This same percentage was used for purposes of estimating the number of homes and businesses that would contract with the City for this service in the three areas under consideration for annexation.

The Director of Sanitation has stated that the extension of this service to either Area I or Area II would require the purchase of an additional garbage and refuse collection truck, and the hiring of four additional men. In addition, there would be the cost of operating and maintaining the truck, the cost of billing the new customers, and the fees charged by the landfill company. The estimated first-year cost of these items for Area I is as follows:

The estimated total cost for Area II is \$26,056. This figure is smaller than that for Area I because it is estimated that there will be fewer customers in Area II than in Area I. (See page 21 of this report for estimated number of customers in each area.) Consequently, the cost of billing and landfill fees will be less for Area II than for Area I. It is estimated that the cost of operation and maintenance of the truck will be the same in each area.

It should be noted that the total cost of the truck has been charged to the first year. However, it is estimated that the life of the truck chassis would be three years and that of the body, seven years. Consequently, the annual cost of this service to Area I would be substantially less after the first year.

It is estimated by the Director of Sanitation that any trade-in value of the chassis would be offset by the cost of taking the body off the wornout chassis and mounting it on a new chassis. The Director of Sanitation also estimates that at the end of seven years the body would have no trade-in value.

The Director of Sanitation has stated that if either Area I or Area II were annexed separately or in combination with Area III, the work of garbage and refuse collection would be organized to make the fullest use of all available personnel and equipment. Specifically, the additional truck and personnel required if Area I or Area II were annexed would not be assigned just to the annexed area or areas, but would be assigned in a manner that

would make the fullest use of them. The Director of Sanitation estimates that the present equipment and personnel is being used almost to capacity. Consequently, if an additional truck is made available because of annexation, the number of customers per truck could be reduced below the present near-capacity figure, and thus new customers resulting from population growth could be served.

It is estimated that there would be no costs for additional personnel or equipment for garbage and refuse collection or operation and maintenance of equipment if Area III were annexed. The estimated costs for billing and landfill fees chargeable to this area would be \$85.

Forestry. The estimated cost of extending forestry service to annexed areas is based primarily on data furnished by the official in charge of forestry.

This official estimates that the cost of extending forestry service to one, two, or all three areas would be the same. For the purchase and maintenance of equipment \$150 would be needed, and \$510 would be needed for the salary of a part-time worker three months of the year.

The additional services of the part-time worker would not be employed only in the annexed areas, but also in Kirkwood. This would mean that additional forestry service would be available to Kirkwood to meet the increased demand for such service due to population growth.

Streets. The estimated cost of extending street maintenance service is based primarily on data furnished by the City Engineer.

There are approximately 15 miles of streets in areas I, II, and III, with approximately eight miles of these being improved streets. The City Engineer has stated that the cost of improving the approximately seven miles of unimproved streets would be paid by special tax bills. Once such streets were improved, however, the cost of maintenance would become the responsibility of Kirkwood. The City Engineer estimates the average annual cost of maintaining the present improved streets at \$3,700 a mile.

The City Engineer estimates that street lights could be rented from the Union Electric Company on an annual basis for \$74 per unit. The estimated cost for street markers is \$10 per marker.

In Area I, there are an estimated 2.5 miles of improved streets and 2.5 miles of unimproved streets, a total of 5 miles. The estimated annual cost of maintaining the improved streets is \$9,250 and for street light rental, \$2,958, making a total of \$12,208.

In Area II, there are an estimated 4 miles of improved streets and 4.2 miles of unimproved streets, a total of 8.2 miles. The estimated annual cost of maintaining the improved streets is \$14,600; for street light rental, \$1,650; and for street markers, \$150; making a total of \$16,400.

In Area III, there are 1.55 miles of improved streets and 0.59 miles of unimproved streets, a total of 2.14 miles. The estimated annual cost of maintaining the improved streets is \$5,735, and for street light rental, \$646, making a total of \$6,381.

Building, Zoning, and Plumbing Inspection. The City official in charge of building, zoning, and plumbing inspection has stated that if any area or combination of areas under study are annexed, an additional inspector would

be required at an estimated annual salary (including Social Security Tax) of \$3,570. This additional inspector would be not assigned to make inspections only in the annexed areas, but also in Kirkwood. This would mean that additional inspectional service would be available to Kirkwood to meet the increased demand for such a service due to population growth.

General and Municipal Fund Revenues

For each of the areas studied, there are several sources of revenue. These sources are the property tax, county road and bridge tax refund, gasoline tax, and various licenses, permits, fees and fines. Table 4 presents the estimated assessed valuation of taxable property in areas I, II and III. Table 5 presents the estimated revenue that would be available from each area.

Table 4

ESTIMATED ASSESSED VALUATION OF TAXABLE PROPERTY IN  
AREAS I, II AND III  
GENERAL AND MUNICIPAL FUND

Class of Property	Estimated Assessed Valuation (1956)			
	Area I*	Area II	Area III	Total
Real -----	\$1,508,540	\$ 795,800	\$828,096	\$3,132,436
Personal -----	208,830	175,000	114,065	497,895
Public Utilities -----	130,466	56,000	24,429	210,895
	<u>\$1,847,836</u>	<u>\$1,026,800</u>	<u>\$966,590</u>	<u>\$3,841,226</u>

\*1955 actual assessed valuation figures. 1956 figures were not available from the County Clerk at the time this study was made.

Table 5

ESTIMATED REVENUE FROM AREAS I, II AND III  
GENERAL AND MUNICIPAL FUND

Source of Revenue	Estimated Revenue			
	Area I	Area II	Area III	Total
Property Tax* -----	\$8,130	\$4,518	\$ 4,253	\$16,901
County Road and Bridge Tax Refund -----	2,000	1,000	1,015	4,015
Merchants, Manufacturers, and Other Business Licenses -----	115	3,272	1,554	4,941
Auto Licenses -----	1,500	1,000	750	3,250
Gasoline Tax -----	---	6,200	15,000	21,200
Garbage & Refuse Collection Fee -----	7,434	5,305	1,926	14,706
Miscellaneous -----	<u>1,235</u>	<u>1,431</u>	<u>1,849</u>	<u>4,515</u>
Total	<u>\$20,414</u>	<u>\$22,726</u>	<u>\$26,347</u>	<u>\$69,528</u>

\*Based on the tax rate of 44¢ per \$100 of assessed valuation now levied for the General and Municipal Fund.

Determination of Property Tax Revenue. In order to determine the amount of revenue from the property tax for each area, it was necessary to determine the assessed valuation of real property, personal property, and the property of the public utilities.

Exact figures on the assessed valuation of taxable property in Area I (Oakland) were available from the St. Louis County Clerk's Office. The County Clerk, however, was unable to furnish similar figures for Areas II and III because they are not governmental taxing units.

In the case of the assessed valuation of real property in Areas II and III, the figures used were taken, parcel by parcel, from the records of the County Assessor. Since Meacham Park is a part of the Meacham Park Fire District, the assessed valuation of Meacham Park was determined by subtracting from the assessed valuation of the Meacham Park Fire District those parcels of land and those improvements not included in the Meacham Park area.

The assessed valuation of personal property in Areas II and III could not be determined with exactness, because it was not possible to obtain all the names of owners of personal property in each area. The figure used for Area II was determined by multiplying the estimated number of homes in the area by the average assessed valuation of the personal property of a sample of home owners in the area. The figure used for the assessed valuation of personal property in Area III is the average of the assessed valuations of personal property in eight municipalities, each having approximately the same population and other characteristics as Area III.

The assessed valuation of the property of public utilities in Areas II and III had to be estimated. Since the area of Meacham Park was determined

to be about 80% of the Meacham Park Fire District, 80% of the assessed valuation of the public utilities in the Meacham Park Fire District property was used as the approximate assessed public utility valuation for Area II.

The figure used for the estimated assessed valuation of public utility property in Area III is the average of the total assessed valuation of public utility property in eight municipalities, each having approximately the same area as Area III.

County Road and Bridge Tax Refund. Each year, the County Highway Department is authorized by the County Council to establish a road fund for each municipality. Fifty per cent of the revenue collected from the levy of the County Road and Bridge Tax within each municipality is credited to its road fund. During the year, any municipality may withdraw part or all of the revenue in its road fund for road maintenance. Money not used in one year is carried over as a balance to the next year. A balance remaining at the end of the second year reverts back to the County.

The figures presented in Table 5 for the estimated revenue from the County Road and Bridge Tax Refund were computed by multiplying 50% of the estimated assessed valuation of all property in each area, including merchants and manufacturers inventory, by the County Road and Bridge Tax rate of 21¢ per \$100 of assessed valuation. All revenue from this source is allotted to the General and Municipal Fund.

Business Licenses. The estimated amount of revenue that would be collected from the merchants and manufacturers license and other business licenses was computed by multiplying the proper license fee (flat rate or a percentage of the estimated gross annual sales) by the number of commercial establishments located in each area. The number of such establishments in each area is as follows:

Area I	-----	3
Area II	-----	25
Area III	-----	25

Automobile Licenses. The estimated amount of revenue available from the automobile license was determined by multiplying the estimated number of automobiles in each area by the license fee of \$5.00. The estimated number of automobiles in each area is as follows:

Area I	-----	300
Area II	-----	200
Area III	-----	150

Gasoline Tax. The estimated revenue for the gasoline tax was computed by multiplying the estimated annual total of gallons sold by each station in each area by the tax rate of one cent per gallon. The number of gasoline stations and the total estimated number of gallons sold in each area are as follows:

	Gasoline Stations	Estimated No. of Gallons Sold
Area I	-----	0
Area II	-----	4
Area III	-----	10

Garbage and Refuse Collection Fee. In order to estimate the revenue to be received from garbage and refuse collection fees it was necessary to estimate the number of users of the service in each area and then multiply the total number of users by the annual fee of \$18. The estimated number of users in each area is as follows:

Area I	-----	413
Area II	-----	297
Area III	-----	107

Miscellaneous Revenues. The following are the four classes of miscellaneous sources of revenue:

1. Permits (building, plumbing, electrical, and excavation permits)
2. Licenses (liquor, dog)
3. Fees (food establishment inspection, dog pound release)
4. Fines (police court)

Building, plumbing, electrical, and excavation permits vary according to the type of construction or work done. An estimate of revenue from permits for each area is as follows:

Area I	-----	\$ 545
Area II	-----	272
Area III	-----	1,362

Licenses for selling liquor vary according to the alcoholic content of the liquor sold and also according to the way in which it is sold. Dog licenses are \$1 or \$2, depending on the sex of the dog. The estimated amount of revenue from liquor and dog licenses is as follows:

Area I	-----	\$ 172
Area II	-----	443
Area III	-----	115

Fees vary according to activity. The food establishment inspection fee is \$8 a year per establishment. The dog pound release fee is \$2. The estimated amount of revenue from these fees is as follows:

Area I	-----	\$ 18
Area II	-----	16
Area III	-----	72

Police court fines vary according to the offense. The estimated amount of revenue from fines is as follows:

Area I	-----	\$ 500
Area II	-----	700
Area III	-----	300

#### Summary of Annexation Costs and Revenues

The tabulation below summarizes for the General and Municipal Fund the estimated costs of extending the municipal services of Kirkwood to the three areas under consideration, and the estimated revenues that would be obtained from these areas after annexation, assuming no changes in the tax rates and other charges presently levied by Kirkwood. The increase in the property tax rate required to pay the excess of costs over revenues is also shown.

	Area I	Area II	Area III	All Three Areas
Total estimated costs-----	\$80,386	\$97,306	\$47,377	\$121,282
Total estimated revenues -----	20,414	22,726	26,347	69,528
Excess of costs over revenues--	59,972	74,580	21,030	51,754
Property tax rate increase needed to pay excess of costs over revenues* -----	14¢	17-1/2¢	5-1/2¢	12-1/2¢

\*The 1956 assessed valuation for real and personal property plus the 1955 assessed valuation of the property of public utilities were used to determine the total assessed valuation of property in Kirkwood of \$42,532,239.

It will be noted that the estimated cost of annexing all three areas is considerably less than the figure that would be arrived at by adding the estimated costs of annexing the areas individually. This difference results from the fact that city officials estimate that the costs of extending certain services, such as police, forestry, and building, zoning and plumbing inspection, would be the same regardless of whether one area or all three areas were annexed.

#### Costs of Annexation

The analysis reveals that, for each area being considered for annexation, the costs would exceed the revenues collected from present taxes and charges. Annexation of Area I would require an increase in Kirkwood's property tax of 14¢ per \$100 of assessed valuation. For Area II the tax rate increase would be 17-1/2¢, and for Area III, 5-1/2¢. If all three areas were annexed, it would be necessary to increase the Kirkwood tax rate by 12-1/2¢.

Several additional points should be emphasized regarding the estimated costs of annexation. First, the costs of annexation presented in this study are for the first year only. The cost of equipment, such as a police patrol car and a garbage and refuse truck, would be less after the first year. In the case of the patrol car, its trade-in value after the first year would reduce the cost of the new car that would be purchased annually.

In the case of the garbage and refuse truck, the extended life of the truck would reduce the yearly costs until a new body and a new chassis had to be purchased.

Second, the additional personnel and equipment required for police, fire, sanitation, forestry, and building, zoning, and plumbing inspection services would also be available for expansion and improvement of services in the present Kirkwood area and to help meet the increasing demands for such services due to population growth.

Third, the estimated costs of annexation do not allow for possible development of neighborhood parks in the annexed areas, nor for relocation or construction of fire stations in order to make areas II and III eligible for the same fire insurance rates as the present area of Kirkwood.

Finally, it has not been determined whether private utility companies would extend electric and water services to all portions of the annexed areas, or whether it would be necessary for Kirkwood to extend its municipally-owned services to the areas.

#### Revenue Received From Annexation

The revenues which Kirkwood would obtain from the three areas, if annexed, are based on estimated and actual figures for 1956. The assessed valuation of real, personal, and public utility property in Area I probably will not increase by any sizable amount, since this area is almost completely developed as a residential area.

In Area II a change in land use and an increase in assessed valuation appear probable. Such change has, in fact, already commenced, as evidenced by the recent construction of a large hardware store on land formerly owned by a private school. This store has not yet been assessed, but its assessed valuation may be more than \$100,000. In addition, it is possible that the

remaining 80 acres of the Mary Hurst property will be sold for commercial and business uses, thereby increasing the assessed valuation of this property.

In Meacham Park, there are still a number of vacant lots which may be improved in the future, thus adding to the assessed valuation of the area. However, a more significant potential development of this area is its possible acquisition by the St. Louis County Land Clearance For Redevelopment Authority. If Meacham Park is found to be a blighted area, the Redevelopment Authority has the power to carry out a program for acquiring the area through eminent domain and making it available for private housing development or, if zoning laws permit, for industrial or commercial use. Such changes in the land use of the area undoubtedly would increase its assessed valuation.

In Area III, the Sunset Manor area is not fully developed and its assessed valuation should increase in the future. The Highway 66 portion of Area III is still largely undeveloped. It is possible that it will be subdivided, and if this area is taken into the St. Louis Metropolitan Sewer District, it could be rezoned from its present one-acre and one-half acre tracts to smaller residential lots, increasing its assessed valuation.

#### CONCLUSION

None of the areas being considered for annexation would produce enough revenue immediately to offset the costs of extending Kirkwood's municipal services. This conclusion is subject, however, to the following qualifications: (1) the costs of extending certain municipal services, such as police and fire protection, and garbage and refuse collection should not be considered solely as costs of annexation, because the additional personnel and equipment acquired would also be used to expand services in the present Kirkwood area and to provide for future expansion of these services as the need arises; (2) certain costs of additional equipment, such as a police car, would

be less after the first year; and (3) the property tax revenue and other revenues would increase in the future as new homes and businesses were built in the annexed areas.

Annexation would provide room for further expansion of Kirkwood's residential, commercial, and industrial property. This would be true in Area II and in Area III. Area I, however, is almost completely developed.

Annexation would allow Kirkwood to extend its municipal powers, including its zoning and building ordinances, to the annexed areas. This would help insure the orderly development of the annexed areas in a manner beneficial both to Kirkwood and to them.

The development of Area I has been similar to that of Kirkwood, and its annexation probably would offer few problems. Area III is mostly undeveloped, and its annexation would mean that Kirkwood would be able to plan this area's orderly development.

In Area II, however, the future development of Meacham Park probably would not be as easy to plan. Despite its original development over 50 years ago, Meacham Park does not have the same municipal facilities and improvements Kirkwood has. For example, it does not have complete systems of streets or water mains, nor does it have adequate fire, police, or health protection. Many changes and improvements would be necessary if Meacham Park were to have municipal facilities and services comparable to those of Kirkwood. However, lack of these facilities and services creates problems, such as health hazards, not only for the residents of Meacham Park, but also for residents of Kirkwood. Annexation would put residents of Kirkwood and Meacham Park in a better position to work out solutions for the problems they have in common.